

hibitions. Photograph 2 shows a number of such groups, each group consisting of three or four mounts and arranged according to the economic importance of the insects represented, e. g., one group contains insects of the household (clothes moth, cheese skipper and carpet beetle) and another includes three shade tree pests (the horned tail, tussock moth, and leopard moth.) Students and visitors show considerable interest in these exhibits and, perhaps unconsciously, derive a great deal of information from them.

3. A method of displaying insect galls. Biologically the gall insects are among the most interesting of the whole class. The insect galls may be prepared for exhibition in the following manner (see Photo 3.) Racks three feet long, eight inches high, and two and one half inches deep are made, with the top piece hinged at both ends. Strips on the edges at the top and bottom prevent the bottles from falling out. Galls on stems are dried and placed in large mouthed vials about two inches in diameter, and a label is placed at the bottom. Galls on leaves are preserved in 10% formalin and placed in bottles about two and one half inches in diameter. The bottles or vials fit loosely enough in the racks so that they can be turned around and all sides of the galls can thus be examined but their removal is prevented by the strip near the top and bottom. If, however, it becomes necessary to take out a bottle, the hinge at one end of the top can be disjoined and the desired specimen removed. A background of white cardboard helps to bring out the characteristics of the galls. Such a rack as that described may, of course, be used for other material both zoological and botanical.

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#### THE SEDGWICK-RAFTER OCULAR MICROMETER AND ITS USES

In 1889 Prof. W. T. Sedgwick and Mr. George W. Rafter developed the so-called Sedgwick-Rafter method for enumerating microscopic organisms to be found in water,—a procedure which has since come into general use among biologists, chemists and engineers investigating or in charge of water supplies, and has been incorporated as a part of the Standard Methods of Water Analysis adopted



PLATE XXVI FIG. 1

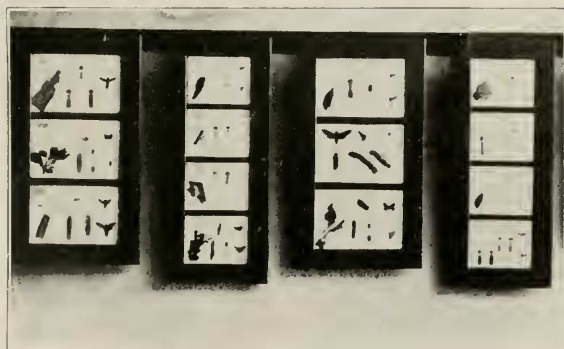


PLATE XXVI. FIG. 2

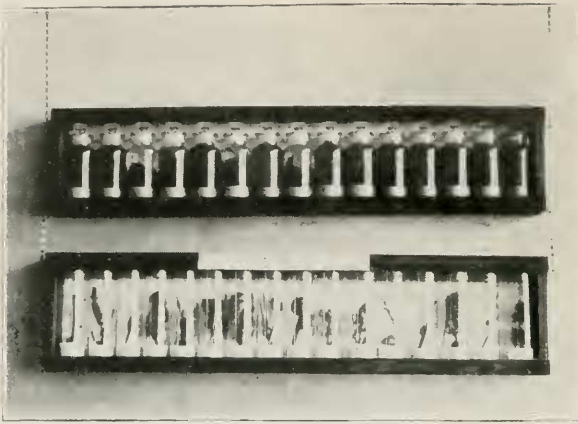


PLATE XXVII. FIG. 1

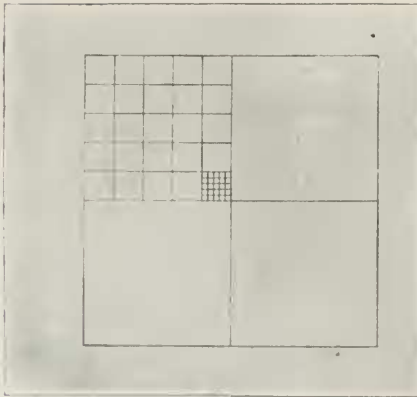


PLATE XXVII. FIG. 2